Work Order II		553		*11	1553*							Page 1
tem ID: D349 Revision ID:	92-3			Accept	*N900	<u>ი</u> 4ი	100)*	Setup		*N:	S1*
tem Name: Plug										Stop	*N!	S2*
Start Date: 1/15	14	Start Qty: 120.0	00 *-	120*	Cust Item I	D:						
Required Date: 1/31/ Reference:	14	Req'd Qty: 120.0)0	120*	Customer:							•
Approvals: Pro	cess Plan	:_MCJ	Date: 14-	0.176 Tooling:	D:	ate:	_	;	Run	Start	*N	R1*
QC				SPC (Y/N):	Da	ate:				Stop	*N	R2*
equence ID/ Vork Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
Draw Nbr	Revi	sion Nbr				·						
D3492	Е											_
00				0.00			Dà				(X 6	23)
*100 *		Hardinge CNC LATH	E SMALL				ું ૦૦ પ	jar	14-	01-2	3	JFC 201
Hardinge		Memo		0.00			189	/	_			50 50
łardinge CNC Lathe Sma	1	1-Turn as Dwg Rev: Folio Rev		Dwg D3492								-
10		QC2- Inspect parts off	machine FAI/FAIB	0.00								· !
*11 0 *		Memo		0.00				_123			Day O2U	JFC 2014

120

QC8- Inspect parts - second check

0.00

ont 14/01/23 123 8

1 20

Memo

0.00

Quality Control

															d'anne
DQA:			Date:			WORK ORDER NON	cc		DAMARICE / III	DDATE					TRAG
QA Closed:			Date:			WORK ORDER NON-	-00	JINFOR	RIVIAINCE / OI		Wc	ork Order up	date only		AEROSPACE
Work Orde	er:					DISPOSITION		1		AGAINST I	DEI	PARTMENT	/PROCESS		
Part N	- ۱٥٠					Rework Scrap Use-as-is Suspected Unapproved		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite			Water Jet d. Eng. Coor e/Packaging Supplier		Engineering Quality Other
Root					Desc	ription of work order update		nitial	Act	ion	П	Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	ription		Date	Verification	n_	QC Inspector
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	\vdash	Cracks			\vdash	Broken/Damage/Defect		Hardwa				Part Incorred		\vdash	Temperature/Cure
•	<u> </u>	Crimp/Kir	ık/Ripple	/Wave	-	Burrs	<u> </u>	4 '	on Incomplete/Ur	· •	$\overline{}$	Part Lost/Mi	ssing	-	Weld
	\vdash	Cuffs			<u> </u>	Contamination	\vdash	4	ions Incomplete/l	Unclear	_	Part Moved			Wrong Stock Pulled
		Crushing			\vdash	Countersink	\vdash	-	ned/off center	}	_	Positioned V	=		٦٠٠٠
		Heat Trea	it		L	Cut Too Short	Ш	Mislabe	eled			Power Loss/	Surge	L	Other

Misread

Off-set

Out of Calibration

Out of Sequence

Marks/Chatter

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Drawing

Finish

Drill Holes

Fit/Function

OC

Quality Control

Memo

DQA:			Date:										
						WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE				AEROSPACE
QA Closed:			Date:							W	ork Order up	date only	, in the second
Work Orde	r·					DISPOSITION			AGAII	NST DE	PARTMENT	/PROCESS	
Work Orde	•					Rework	ıl		Skid-tube Crosstu	ube	1	Water Jet	Engineering
Part N	ο.					Scrap			Machining Small		Pro	d. Eng. Coor.	Quality
	-	· · ·			_	Use-as-is			noforming Finish	ning	4	re/Packaging	Other
NCR N	o. -					Suspected Unapproved			Large Fab Compos	site]	Supplier	
Root					Desci	ription of work order update		nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	ı	ief Eng			Date	Verification	QC Inspector
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		Cracks			<u> </u>	Broken/Damage/Defect	<u> </u>	Hardwa		\vdash	Part Incorred		Temperature/Cure
 		Crimp/Kir	ik/Ripple,	/Wave	<u> </u>	Burrs		1 '	ion Incomplete/Unqualified	ļ-	Part Lost/Mi	ssing	Weld
		Cuffs			\vdash	Contamination	\vdash	i	tions Incomplete/Unclear	-	Part Moved		Wrong Stock Pulled
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		Marks/Ch			-	Drill Holes	-	Off-set					
] , }		Turning S Wave/Tw			-	Finish Fit/Function	\vdash	4	Calibration Sequence		_		
1 1		vvave/ I W	ISCHI TUD	15	- 1	programation	1	Jour of 3	sequence				

Work Ord				*111	1553*							Page 3	
Item ID:	D3492-3			Accept	*N900	<u>040</u>	100)*	Setup	Start	*N	S1*	
Revision ID: Item Name:	Plug									Stop	*\\	S2*	
Start Date: Required Date	1/15/14	Start Qty: 120.00 Req'd Qty: 120.00	*120 *120		Cust Item I Customer:	D:					ı u	. 12	
Reference:		1104 a 2051 120100	* 1 2 ()^	Customer.		_			C44			
Approvals:	Process Pl	lan:	Date:	Tooling:	Da	ate:			Run	Start	*N	R1*	
••	QC:		Date:	SPC (Y/N):	Da	ate:				Stop	*N	R2*	
Sequence ID/ Work Center		Operation Description Identify as per dwg & Stor	ck Location: fl ² .	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Re Qt		Reject Number	Insp. Stamp	
160 Packaging		Memo		0.00			j	123×	_		H	11/01/20	<u>-</u>
Packaging													
170		QC21- Final Inspection -	Work Order Release	0.00				d			W-G	1-28	
170		Memo		0.00				/	M Cu)((7 - 0	1 0	
Quality Control											_ //	101-2	S

MC5 14-01-28

DQA:			Date:											
						WORK ORDER NON-	-CC	ONFO	RMANCE / UI					AEROSPACE
QA Closed:			Date:							<u> </u>	Work	Order up	date only	
Work Orde	r:					DISPOSITION				AGAINST [DEPA	RTMENT	PROCESS	
	-				_	Rework			Skid-tube	Crosstube			Water Jet	Engineering
Part N	o.					Scrap			Machining	Small Fab		Pro	d. Eng. Coor.	Quality
	•					Use-as-is		Therr	noforming	Finishing		Rec/Stor	e/Packaging	Other
NCR N	lo.					Suspected Unapproved			Large Fab	Composite			Supplier	
D t				i	Daga		ᅥ		1 0 0	ian	_	Cian 0		
Root		Data	Cton	0+1/	Desci	ription of work order update or non-conformance	ı	nitial iief Eng	1	ion		Sign & Date	Verification	QC Inspector
Cause	\dashv	Date	Step	Qty		or non-conformance	Cil	nei Eng	Desci	ription	+	Date	vermeation	QC Inspector
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		Bending				Bend		4	Program	Ļ		utside Dim	⊢	Pressure/Forced
		Centre No	ot Concer	ntric	<u> </u>	BOM/Route	<u> </u>	Grain				ver/Under	-	Set-up
		Cracks			<u> </u>	Broken/Damage/Defect	<u></u>	Hardwa		_		art Incorred		Temperature/Cure
		Crimp/Kir	ık/Ripple	/Wave		Burrs		4 '	ion Incomplete/Ur	·	— 1	art Lost/Mi	-	Weld
	_	Cuffs			<u> </u>	Contamination	<u> </u>	4	tions Incomplete/l	Jnclear -		art Moved		Wrong Stock Pulled
		Crushing			<u> </u>	Countersink		-	gned/off center		_	ositioned V		Tout an
		Heat Trea		TL -	\vdash	Cut Too Short	-	Mislab		L	P	ower Loss/	Surge	Other
		Inspection		lube	-	Drawing	-	Misrea						
		Marks/Ch			\vdash	Drill Holes	\vdash	Off-set	Calibration		_			
}		Turning S			\vdash	Finish Fit/Function	-	4			_			
	Wave/Twist in Tube				[Fit/Futiction		Jour or	Sequence						

January-15-14 1:17:59 PM

Work Order ID:

111553

Parent Item:

D3492-3

Parent Item Name:

Plug

Start Date: 1/15/14

Required Date: 1/31/14

Start Qty: 120.00

Required Qty: 120.00

Comments:

IPP Rev:A 11.04.19 per dwg revC DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.750 6061-T6 Round Bar .750"		Purchased	No			100	f	69.7100	0.06	7.578948			
				Location		Loc Oty	Lo	c Code					
				MAT012		69.71							
				m126	852	69.71			<u>7.5</u>	578948	JFC	2014-	01-21

DQA:			Date:			WORK ORDER NON	~	NEO		DDATE				7	DART
QA Closed:			Date:			WORK ORDER NON	-CC	JINFOI	KIVIANCE / UI		Wc	ork Order up	date only	\neg	AEROSPACE
						DISPOSITION			† 1 <mark>2</mark> -			PARTMENT	· 1		
Work Orde	er: _						.			AGAIII .			- 110-0233		
						Rework			Skid-tube	Crosstube			Water Jet		Engineering
Part N	lo.					Scrap		1	Machining	Small Fab			d. Eng. Coor.	_	Quality
						Use-as-is		Thern	moforming	Finishing	_	Rec/Stor	e/Packaging	_	Other
NCR N	lo.					Suspected Unapproved]		Large Fab	Composite			Supplier		
Root					Desc	ription of work order update		nitial	Act	ion		Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption		Date	Verification		QC Inspector
Design						· · · · · · · · · · · · · · · · · · ·								l	
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Transport						•									
Unapproved												l	****		
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Landi		1			_	General		1		1		1	Г	_	
		Bending				Bend	ļ	1	Program			Outside Dim	F-	_	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			<u> </u>	Over/Under		_	Set-up
		Cracks			<u> </u>	Broken/Damage/Defect		Hardwa				Part Incorre			Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs	_	4 .	tion Incomplete/Ur	-	_	Part Lost/Mi	_		Weld
		Cuffs			┡	Contamination	_	-1	tions Incomplete/U	Jnclear	<u> </u>	Part Moved			Wrong Stock Pulled
		Crushing			lacksquare	Countersink		• `	gned/off center		L	Positioned V	· · · · ·		
	<u> </u>	Heat Trea				Cut Too Short		Mislab				Power Loss/	Surge [Other
		Inspectio		Tube	\perp	Drawing	\vdash	Misrea				-			
	<u> </u>	Marks/Ch			<u></u>	Drill Holes	<u></u>	Off-set							
		Turning S	•			Finish		4	Calibration			_			
1		Wave/Tu	ist in Tuh	ne .		Fit/Function	1	lOut of	Sequence						

D3492-XX PLUG (SEE TABLE)--NAS1611 O-RING (SEE TABLE)

D3492-XXX PLUG PARTS LIST

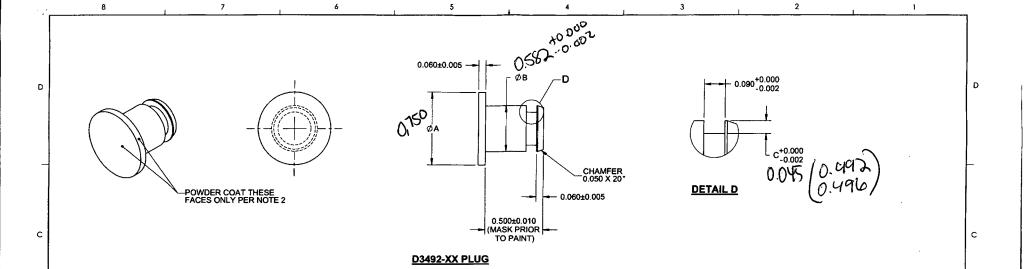
						_ ,,,,		O I AILIO EIOT		
QTY -041	QTY -043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	QTY -055	PART NUMBER	DESCRIPTION	٦
X	Ī							D3492-041	PLUG ASSEMBLY	7
	X							D3492-043	PLUG ASSEMBLY	7
		X						D3492-045	PLUG ASSEMBLY	7
	I		Х					D3492-047	PLUG ASSEMBLY	7
				Х				D3492-049	PLUG ASSEMBLY	7
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						Х	L	D3492-053	PLUG ASSEMBLY	٦.
							X	D3492-055	PLUG ASSEMBLY	
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1								D3492-1	PLUG	4
	1							D3492-3	PLUG	4
		1						D3492-5	PLUG	_
			1				L	D3492-7	PLUG	
				1				D3492-9	PLUG	_
					1			D3492-11	PLUG	
						1		D3492-13	PLUG	3 .
							1	D3492-15	PLUG	<u>]</u>
		1						NAS1611-005	O-RING	-
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1			- -			-		NAS1611-010	O-RING	-
					-	1		NAS1611-012	O-RING	-
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					' -		<u> </u>		O-RING	-
				1				NAS1611-016	J O-KING	J

NOTES: 1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

E	ADD -055 PLUG ASSY & -15 PLUG	AP	13.08.08
D	INCORPORATED DEO D3492-C-1. SHT 2 DIM C FOR -1 WAS 0.055. (SEE CAR11-048)	AJS	11.05.24
С	ADD -049/-051/-053, CHANGE DRAWING FORMAT	PH	07.10.05
В	ADD -047; UPDATE DIM A FOR -045	PH	06.05.11
Α	NEW ISSUE	PH	06.01.04
REV.	DESCRIPTION	BY	DATE

DESIGN	PH	」 DART AERC	SPACE LTD
DRAWN	AP	HAWKESBURY, O	NTARIO, CANADA
CHECKED	455	DRAWING NO.	REV. E
MFG. APPR.	N/	D3492	SHEET 1 OF 2
APPROVED	143	TITLE	SCALE
DE APPR.	-#	PLUG	NTS
DATE 13.0	8.08	COPYRIGHT © 2007 BY THEI DOCUMENT IS PRIVATE AND CONFIDENTIAL AND NOT TO BE USED FOR ANY PURPOSE OR COPIED ON WEITTEN PERSONSION FRO	COMMENCATED TO MAY OTHER PERSON WITHOUT

С



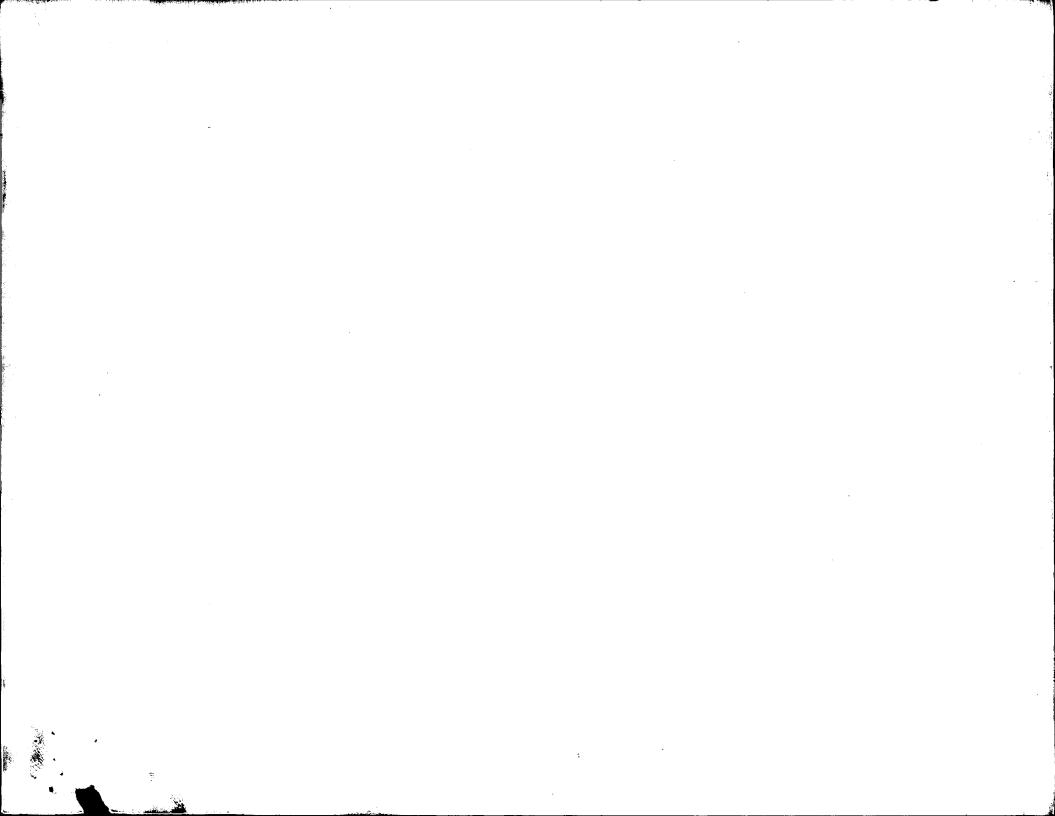
D3492-XX PLUG MACHINING DETAILS

P/N	Α	В	С	MATERIAL SPEC	
D3492-1	0.625	0.394	0.050	M6061T6R0.625	
D3492-3	0.750	0.582	0.045	M6061T6R0.750	\Box
D3492-5	0.375	0.188	0.045	M6061T6R0.375	
D3492-7	0.500	0.270	0.045	M6061T6R0.500	
D3492-9	0.938	0.750	0.045	M6061T6R1.000	
D3492-11	0.850	0.664	0.045	M6061T6R0.875	
D3492-13	0.750	0.510	0.045	M6061T6R0.750	
D3492-15	0.850	0.640	0.050	M6061T6R0.875	

NOTES:
1) MATERIAL: ALUMINUM 5052-H32 OR 6061-T6 OR 1100-0 PER QQ-A-225/7 (5052) OR QQ-A-225/8 (6061) OR QQ-A-220/8 (6061) OR QQ-A-225/1 (1100) (REF. DART MATERIAL SPEC M6061T6R0.000)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: N/A

6

DESIGN	PH	DART AERO	SPACE LTD
DRAWN	AP	HAWKESBURY, O	NTARIO, CANADA
CHECKED	155	DRAWING NO.	REV. E
MFG. APPR.	77	D3492	SHEET 2 OF 2
APPROVED	NO	TITLE	SCALE
DE APPR.	-#-	PLUG	4:1
DATE 13.6	80.80	COPYRIGHT © 2007 BY THE DOCUMENT IS PRIVATE AND CONFIDERTIAL AND NOT TO BE WIED FOR MY PURPOSE OR COPPED OR	COMMUNICATED TO ANY OTHER PERSON WITHOUT



DART AEROSPACE LTD		Work Order:	111553	
Description: Plug		Part Number:	D3492-3	
	1			
Inspection Dwg: D3492	Rev: 0 E		Page 1 of 1	
	/ //4.01.12			

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.750	+/-0.010	.744	_			
Ø0.582	+0.000/-0.002	.5 80				
0.045	+0.000/-0.002	.045				
0.060	+/-0.005	.057	/			
0.060	+/-0.005	.060	/			
0.500	+/-0.010	,501				
0.090	+0.000/-0.002	,090				
	0.					

	1 3			
Measured by:	136 14 dt	Audited by:	Preliminary Approval:	
Date: 2014		Date: 14-1-2	Z Date:	

Date	Change	Revised by	Approved
06.07.07	New Issue P/O D3492-043	KJ/JLM	
06.10.16	Ø0.750 was Ø0.625	KJ/JLM	
08.09.04	Tolerance revised for Ø0.750	KJ/DD	
11.06.21		KJ 🕠	
12.10.26	Tolerance revised for Ø0.582	KJ KJ	M
	06.10.16 08.09.04 11.06.21	06.07.07 New Issue P/O D3492-043 06.10.16 Ø0.750 was Ø0.625 08.09.04 Tolerance revised for Ø0.750 11.06.21 Dwg Rev updated	06.07.07 New Issue P/O D3492-043 KJ/JLM 06.10.16 Ø0.750 was Ø0.625 KJ/JLM 08.09.04 Tolerance revised for Ø0.750 KJ/DD 11.06.21 Dwg Rev updated KJ